

REMARKS

The application includes claims 30-49 and 58-65 prior to entering this amendment.

The Examiner rejected claims 30, 31, 33-35, 58-62 and 65 under 35 U.S.C. § 102(b) over Cassarly et al. (U.S. patent no. 5,927,849).

The Examiner rejected claims 32, 36 and 37 under 35 U.S.C. § 103(a) over Applicants Background, and in view of Cassarly et al. and further in view of Murakami (U.S. patent no. 4,460,939).

The Examiner rejected claims 38 and 39 under 35 U.S.C. § 103(a) over the Applicant's Background, in view of Cassarly et al., in view of Murakami et al. and further in view of and Vent (U.S. Patent No. 5,489,457).

The Examiner rejected claim 64 under 35 U.S.C. § 103(a) over Cassarly et al. (5,927,849), and further in view of Bundo et al. (US 6,354,901).

The Examiner found claims 40-49 allowable.

The Examiner objected to claim 63 as being dependent upon a rejected base claim, but stated that it would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant amends claims 30, 32, 34, 36 - 37, 58 - 60, 62 - 64.

Applicant cancels claim 61.

Applicant adds new claims 66 - 72.

The application remains with claims 30 - 49, 58 - 60, and 62 - 72 after entering this amendment.

The Applicant adds no new matter and requests reconsideration in view of the following remarks.

Claim Rejections Under 35 U.S.C. § 102

The Examiner rejected claims 30, 31, 33-35, 58-62 and 65 under 35 U.S.C. § 102(b) over Cassarly et al. (U.S. patent no. 5,927,849). Without admitting the propriety of the rejection, applicant amends claims 30, 32, 34, 36 - 37, 58 - 60, 62, 63 - 64 to facilitate prosecution. For example, claim 30 as amended recites, an optical chassis, comprising:

a shell body having a plurality of inside walls defining an accommodation space;

- a plurality of reflection planes located within the accommodation space, each of the reflection planes formed on a corresponding one of the inside walls;
- a reflective plating film directly formed on at least a portion of each of the plurality of reflection planes to reflect light;
- a lens located within the accommodation space, wherein the lens is configured to receive light from at least one of the reflection planes; and
- an imaging apparatus located within the accommodation space, wherein the imaging apparatus is configured to convert the light into electrical signals.

In rejecting claim 30, the Examiner compares reflectors 12 and 14 of Cassarly to the “plurality of inside walls defining an accommodation space” in claim 30. Cassarly discloses a light coupling arrangement wherein, “reflector 14 reflects light from source 16 to a lens positioned in the wall of reflector 12.” See Fig 1 and col 3, lines 25 - 29. Cassarly does not teach “a lens located within the accommodation space” Rather, Cassarly teaches lenses that are integrated or positioned into the reflectors of the light coupling arrangement. See Fig 1 and col 3, lines 25 – 29.

Additionally, Cassarly does not disclose “an imaging apparatus located within the accommodation space.” The only element shown within reflectors 12 and 14 of Cassarly is a light source. If an imaging apparatus was disposed within the light coupling device of Cassarly, it would likely obstruct the path of light to and/or from the reflectors 12 and 14 because the reflectors in Cassarly are configured to surround the light source (eg. Fig. 1). As Cassarly fails to teach these features, claim 30 is believed to be allowable. As claims 31 - 33, depend on claim 30, they are also believed to be allowable for at least the same reasons as their respective base claim, in addition to further novel features recited therein.

Claim 34 as amended recites, an optical chassis comprising:

- a shell body having a plurality of inside walls defining an accommodation space, wherein the shell body further comprises a lid body and a major body, and wherein the lid body and the major body are formed as separate pieces and subsequently assembled together;
- a plurality of reflection planes located within the accommodation space and formed in the major body; and
- reflective plating film directly coated on the plurality of reflection planes to reflect light.

In rejecting claim 34, the Examiner states on page 3 paragraph 7 of the office action “In addition Cassarly teaches the pair of reflectors 12 and 14 (separate pieces) are joined together to

collectively form the shell body [one reflector is considered as a lid body and the other reflector as a major body.]” Claim 34 as amended states that the plurality of reflection planes are formed in the major body. The reflectors of Cassarly are considered the lid and major bodies by the Examiner. One of the two reflectors forming the light coupling arrangement of Cassarly cannot contain a plurality of reflection planes because both pieces (12 and 14) are each reflectors. As Cassarly fails to disclose these features, claim 34 is believed to be allowable. As claims 35 – 39, depend on claim 34, they are allowable for at least the same reasons as their respective base claim, in addition to further novel features recited therein.

Claim 58 as amended recites, an apparatus comprising:

- a shell body of an optical scanning chassis having a plurality of inside walls defining an accommodation space;
- a first reflection plane formed on the shell body and covered with a reflective plating film;
- a second reflection plane formed on the shell body, wherein the second reflection plane is configured to receive light reflected from the first reflection plane; and
- a third reflection plane formed on the shell body, wherein the third reflection plane is configured to receive light reflected from the second reflection plane, and wherein the first, second, and third planes are located within the accommodation space.

Cassarly discloses a light coupling arrangement wherein “Reflector 12 reflects light from source 16 to a lens positioned in the wall of reflector 14. Similarly, reflector 14 reflects light from source 16 to a lens 20 positioned in the wall of reflector 12.” See col. 3, lines 23 – 26. The reflectors of Cassarly do not reflect from a first reflection plane to a second reflection plane, and from the second reflection plane to a third reflection plane as disclosed in the present application. Rather, the reflectors of Cassarly are configured to guide light directly toward a lens at the same time. As Cassarly fails to disclose these features, claim 58 is believed to be allowable. As claims 59 – 60 and 62 - 65, depend on claim 58, they are believed to be allowable for at least the same reasons as their respective base claim, in addition to further novel features recited therein.

Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 30, 31, 33-35, 58-62 and 65.

Claim Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 32, 36 – 39 and 64 under 35 U.S.C. § 103(a) variously over the following references: Applicant's Background, Cassarly et al. (US 5,927,849), Murakami (U.S. patent no. 4,460,939), Vent (U.S. Patent No. 5,489,457) and Bundo et. al. (US 6,354,901).

As claims 32, 36, 37 – 39, and 64 are dependent claims, they are allowable for at least the same reasons as their respective base claims, in addition to further novel features recited therein. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 32, 36, 37 – 39, and 64.

Allowed Subject Matter

The Examiner allowed claims 40-49. Although Applicant's attorney agrees with the Examiner's conclusion that these claims are allowable, the Applicant's attorney notes that the claims may be allowable for reasons other than those identified by the Examiner and does not concede that the Examiner's characterization of the terms of the claims and prior art are correct.


Conclusion

For the foregoing reasons, Applicant respectfully requests reconsideration and allowance of the remaining claims. The Examiner is encouraged to telephone the undersigned at (503) 224-2170 if it appears that an interview would be helpful in advancing the case.

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Respectfully submitted,

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